

CSREES Portfolio Review Expert Panel Report Summary

Portfolio 1.3 Agricultural and Food Processing / Bio-based Products CY 1999 – 2003

SUMMARY

External Review Completed: May 2004

Portfolio Description

The Food and Non-Food Process and Product Development Portfolio supports the development of new or improved products of high quality through value-added processes that enhance market opportunities for agricultural forest products. In addition to producing high quality food products, it is also possible to create numerous other industrial, pharmaceutical and nutraceutical products from agricultural and forestry resources. These products will play an important role in the sustainability of U.S. agriculture in the future. This portfolio is comprised of the following Knowledge Areas (KA):

- KA 501 New and Improved Food Processing Technologies
- KA 502 New and Improved Food Products
- KA 503 Quality Maintenance in Storing and Marketing Food Products
- KA 504 Home and Commercial Food Service
- KA 511 New and Improved Non-Food Products and Processes
- KA 512 Quality Maintenance in Storing and Marketing Non-Food Products

Summary of Comments and Recommendations

In 2004 a panel comprised of independent experts from the field was convened to assess and score the current state of the Food and Non-Food Process and Product Development Portfolio. A discussion of specific comments and recommendations related to each of the dimensions of the three Office of Management and Budget (OMB) research and development (R&D) criteria used (relevance, quality, and performance) is provided below.

Relevance

Overall, the review panel believes that the relevance of the food and non-food products portfolio is good. Its chief weakness relates to the integration of education and extension with research. This is partly, though not entirely, due to the current reporting systems.

Quality

The data presented to the Panel was of high quality. Unfortunately, metrics were limited making the overall quality of the Portfolio difficult to assess.

Performance

The review panel has rated the general portfolio performance as adequate, though this rating was given mostly on the basis of personal experience, and not presented evidence.

General Comments

- The Panel saw research findings that influence industry definitions, including commercially-viable products, curricula, and patents. There is an opportunity to engage in outreach to capture and integrate teaching and extension, with research.
- The use of peer-reviewed research projects is good, but the Review Panel would like to see examples of cutting-edge methodologies highlighted.
- Figuring out how to capture appropriate, integrated data represents an opportunity for this relatively new portfolio.

Comments on Future Directions presented by CSREES

The panel suggests that the name of this portfolio be changed to “Bio-Based Products” to reflect usage preferences within the disciplines.

The Panel recommends that a cross-walk of portfolios be done to ensure that all relevant subjects, such as economics, are included in this Portfolio. The Portfolio was focused—every Knowledge Area (KA) presentation included contemporary issues and cutting edge technology, and is consistent with the Science Roadmap—but these presentations could be better integrated as a portfolio instead of as individual KAs.

There are formal linkages with the U.S. Department of Energy regarding bio-based energy issues, and the Panel encourages further coordination with other agencies working with bio-based technologies, bio-products and energy.

Data Issues

The Panel applauds CSREES for moving to integrate and automate the Plans of Work and Annual Reports reporting system of Formula Fund programs. This should allow for the retrieval of uniform, meaningful, quantifiable data and provide the basis for accountability within CSREES portfolios.

The portfolio needs to address issues of documentation and evidence and implement a better reporting system before the next review. In the future, evidence should be stronger as mapping and assessment efforts identify program outputs and linkages to activities.

Improvement in the collection of appropriate outcomes and impacts for extension and education will greatly improve the overall issue of integration. Accountability metrics also appear to be lacking. There is room for improvement in the documentation process (better documentation, not more).

Evaluation Issues

The Panel recognizes that the Portfolio review is a new process and that CSREES has made progress in their evaluation of programs. This includes the establishment of a Planning and Accountability unit within the agency and marks an important step in enabling the documentation of meaningful program assessments in the future.

CSREES needs to have very clear examples of performance indicators for future reviews. The evaluation process needs work.

Portfolio Score

Portfolio 1.5.1 received a total score of 80 from the panel. This score places the portfolio in the category ‘moderately effective in supporting CSREES objectives.’